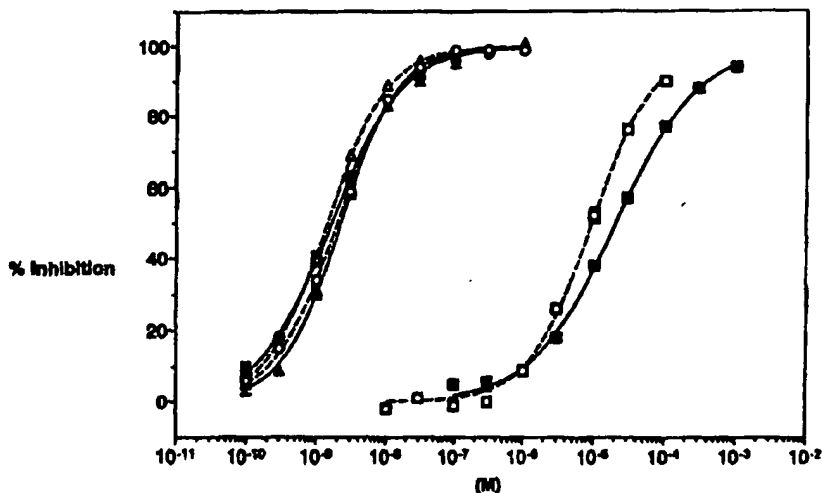




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(21) International Application Number: <b>PCT/EP97/01370</b> (22) International Filing Date: 19 March 1997 (19.03.97) (30) Priority Data: 08/655,716 30 May 1996 (30.05.96) US 08/756,091 22 November 1996 (22.11.96) US (60) Parent Application or Grant (63) Related by Continuation US 08/756,091 (CIP) Filed on 22 November 1996 (22.11.96) (71) Applicant (for all designated States except US): <b>NOVARTIS AG [CH/CH]; Schwarzwaldallee 215, CH-4058 Basel (CH).</b> (72) Inventors; and (75) Inventors/Applicants (for US only): <b>KAUPMANN, Klemens [DE/DE]; Dinkelbergstrasse 9, D-79540 Lörrach (DE). BETTLER, Bernhard [CH/CH]; Kurzellängeweg 9a, CH-4123 Allschwil (CH). BITTIGER, Helmut [DE/DE]; Stadtstrasse 87A, D-79104 Freiburg (DE). FRÖSTL, Wolfgang [AT/CH]; Holbeinstrasse 18/3, CH-4051 Basel (CH).</b>		MICKEL, Stuart, John [GB/CH]; Heinisbodenweg 11, CH-4415 Lausen (CH). (74) Agent: <b>ROTH, Bernhard, M.; Novartis AG, Patent- und Markenabteilung, Klybeckstrasse 141, CH-4002 Basel (CH).</b> (81) Designated States: <b>AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, YU, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</b>	
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(54) Title: **METABOTROPIC GABA<sub>B</sub> RECEPTORS, RECEPTOR-SPECIFIC LIGANDS AND THEIR USES**

(57) Abstract.

The present invention provides purified GABA<sub>B</sub> receptors and receptor proteins derived from rat and human sources, as well as nucleic acids which encode such proteins. The proteins and nucleic acids of the invention share significant homology with the GABA<sub>B</sub> receptor and the DNA encoding it as specifically disclosed herein. The invention moreover provides methods for isolating other members of the GABA<sub>B</sub> receptor family using DNA cloning technology and probes derived from the sequences provided herein, as well as novel members of the GABA<sub>B</sub> receptor family isolated by such methods. Furthermore, the invention relates to the use of GABA<sub>B</sub> receptors and receptor proteins and cells transformed with a gene encoding a GABA<sub>B</sub> receptor protein in a method for identifying and characterising compounds which modulate the activity of the GABA<sub>B</sub> receptor, such as GABA<sub>B</sub> receptor agonists and antagonists, which may be useful as pharmacological agents for the treatment of disorders associated with the central and peripheral nervous systems.